## ARIZONA GAME AND FISH DEPARTMENT HERITAGE DATA MANAGEMENT SYSTEM

Invertebrate Abstract Element Code: <u>IIODO45120</u>

Data Sensitivity: No

# CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE

NAME: Libellula nodisticta
COMMON NAME: Hoary skimmer

**SYNONYMS:** 

**FAMILY:** Libellulidae

AUTHOR, PLACE OF PUBLICATION: Hagen, 1861.

**TYPE LOCALITY:** Unknown

**TYPE SPECIMEN:** Unknown

## **TAXONOMIC UNIQUENESS:**

**DESCRIPTION:** A medium sized dragonfly, each wing with a lengthwise brown stripe at the base and a brown spot at the middle. The thorax is dark brown with 4 yellow spots on each side and the abdomen is dark with dorsolateral yellow stripes on segments 2-8. Mature males are pruinose blue on the thorax and abdomen. Females and immature males are grayish brown and marked with yellow, both on the sides of the thorax and on each abdominal segment. The wings are mostly clear, with each marked at the base with a dark patch and at the center along the leading edge with a small dark spot. Their length ranges from 1 13/16 to 2 1/6 inches (46-52 mm).

**AIDS TO IDENTIFICATION:** A medium sized dragonfly, each wing with a lengthwise brown stripe at the base and a brown spot at the middle. The thorax is dark brown with 4 yellow spots on each side and the abdomen is dark with dorsolateral yellow stripes on segments 2-8. Mature males are pruinose blue on the thorax and abdomen. Females and immature males are grayish brown and marked with yellow, both on the sides of the thorax and on each abdominal segment.

**ILLUSTRATIONS:** Color photo (Behrstock in

http://www.odenews.net/images/LIBNODmdRB.jpg)

Color photo (Danforth In http://www.azodes.com/dragons/skimmers/skim-

hoar.asp)

Color photo (Paulson In

http://imnh.isu.edu.digitalatlas/bio/insects/drgnfly/libefam/lino/linoml.htm)

Color photo (In http://www.sonic.net/~bigsnest/Pond/dragons/HOARY-MS.JPG)

**TOTAL RANGE:** Occurs throughout the Great Basin and somewhat peripheral to it; from Southern Oregon east to central Colorado, south through southern California, Arizona, and New Mexico to Jalisco, Mexico. One source cites as far south as Venezuela.

**RANGE WITHIN ARIZONA:** Arizona.

## SPECIES BIOLOGY AND POPULATION TRENDS

**BIOLOGY:** Adults can apparently disperse for many miles. The naiads live in the debris on the bottom of lakes, ponds, slow streams, marshes and hot springs. They do not actively pursue prey but wait for it to pass by, a strategy which affords them protection from other predators. Naiads emerge as adults at night.

**REPRODUCTION:** The males establish and defend territories at choice breeding locations. After males and females mate, the female flies singly, without the male attached to lay her eggs. She does this by dipping the tip of her abdomen in the shallows of lakes, ponds, slow streams and marshes while hovering just above the water's surface. The flight season is mid May to mid September.

**FOOD HABITS:** The naiads feed on a wide variety of aquatic insects, such as mosquito larvae, other aquatic fly larvae, mayfly larvae, and freshwater shrimp. They will also eat small fish and tadpoles. The adult will eat almost any soft-bodied flying insect including mosquitoes, flies, butterflies, moths, mayflies, and flying ants or termites. Hunting occurs from perches on twigs or rocks.

**HABITAT:** They can be found in warm climates near marshes, lakes, ponds, and slow springs and at hot springs in cooler climates. They prefer springs, stream pools, and ponds with emergent vegetation.

**ELEVATION:** Unknown

PLANT COMMUNITY: Unknown

**POPULATION TRENDS:** Unknown

## **SPECIES PROTECTION AND CONSERVATION**

**ENDANGERED SPECIES ACT STATUS:** 

**STATE STATUS:** 

**OTHER STATUS:** Forest Service Sensitive (USDA, FS Region 3

1999)

**MANAGEMENT FACTORS:** They are threatened by the elimination of shore and near-shore vegetation at most sites by livestock, but persists as long as marsh vegetation remains. And their habitat is threatened by trampling of livestock.

PROTECTIVE MEASURES TAKEN: Unknown

**SUGGESTED PROJECTS:** A study of larval ecology and a formal description of the larva need to be performed.

LAND MANAGEMENT/OWNERSHIP: Unknown

## **SOURCES OF FURTHER INFORMATION**

#### **REFERENCES:**

Available at <a href="http://imnh.isu.edu/dai/bio/insects/drgnfly/libefam/lino/lino.htm">http://imnh.isu.edu/dai/bio/insects/drgnfly/libefam/lino/lino.htm</a>.

Available at <a href="http://www.sonic.net/~bigsnest/Pond/dragons/HOARY-MS.JPG">http://www.sonic.net/~bigsnest/Pond/dragons/HOARY-MS.JPG</a>.

Behrstock, R.A. Available at http://www.odenews.net/images/LIBNODmdRB.jpg.

Danforth, D. 2001. Available: <a href="http://www.azodes.com/dragons/skimmers/skim-hoar.asp">http://www.azodes.com/dragons/skimmers/skim-hoar.asp</a>.

NatureServe Explorer: An online encyclopedia of life [web application]. 2001. Version 1.6. Arlington, Virginia, USA: NatureServe. Available:http://www.natureserve.org/explorer. (Accessed: June 6, 2002).

 $Paulson, D.\ 2001.\ \textit{In}\ \underline{\text{http://imnh.isu.edu.digitalatlas/bio/insects/drgnfly/libefam/lino/linoml.htm}}.$ 

USDA, Forest Service Region 3. 1999. Regional Forester's Sensitive Species List.

Voshell, J. R. 2002. A Guide to Common Freshwater Invertebrates of North America. The McDonald and Woodward Publishing Company. Blacksburg, Virginia. Pp. 302.

#### MAJOR KNOWLEDGEABLE INDIVIDUALS:

### **ADDITIONAL INFORMATION:**

**Revised:** 2002-06-22 (AMS)

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